

DOCUMENT RESUME

ED 285 277

EA 019 625

AUTHOR Estler, Suzanne E.
TITLE Gender Differences in the Perception of Administrative Role Demands.
PUB DATE Apr 87
NOTE 29p.; Paper presented at the Annual Meeting of the American Educational Research Association (Washington, DC, April 20-24, 1987).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Administrator Attitudes; Administrator Characteristics; Competence; Elementary Secondary Education; *Females; *Leadership Styles; *Principals; *Sex Differences; *Superintendents
IDENTIFIERS *Maine

ABSTRACT

Efforts to understand the relationship between gender and school administration have usually focused on explaining the limited numbers of women administrators. Explanations of leadership style differences have stressed sex-role socialization theory, though some researchers suggest that the structure of power, opportunity, and social proportions in organizations strongly influence individual behavior. In the latter view, women are negatively affected by the structural niche they occupy. Other writers suggest that biological and societal forces contribute to gender differences in moral development and interpretations of life experience. If so, there may be differences in the relative importance female and male administrators ascribe to various competencies demanded by their jobs. Also, the general pattern of these differences would remain consistent across roles. Data for this study were gathered through the Maine School Administrator Competency Survey which was sent to all school administrators in the state in 1986. The response rate was 61 percent of all school principals and 66 percent of all superintendents (100 percent of female secondary principals and superintendents responded). This study explores differences and similarities in how women and men administrators view the competency demands of their jobs. The results are summarized in three tables. While most differences were statistically insignificant, women demonstrated higher perceived competency demands across administrative roles. Also, women scored significantly higher on people-related and cognitive competencies and attributes, while the few areas in which men were higher are related to "things" and conflict (facilities management, computer usage, and collective bargaining). Included are six references. (MLH)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED285277

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- ☒ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

*Suzanne E.
Estler*

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

GENDER DIFFERENCES IN THE PERCEPTION OF ADMINISTRATIVE ROLE DEMANDS

A Paper for the
American Educational Research Association
1987 Annual Meeting
Washington, D.C.

by

Suzanne E. Estler

University of Maine

College of Education

April 1987

BEST COPY AVAILABLE

EA 019625

INTRODUCTION

This paper reports the results of research on the competencies and attributes perceived as demanded in their jobs by male and female elementary principals, secondary principals and superintendents in Maine. Based on data gathered through the Maine School Administrator Competency Survey administered to all administrators in the state in 1986, this study specifically focuses on differences and similarities in how women and men in school administration in Maine view the competency demands of their jobs. The degree to which gender differences are mediated by structural elements is assessed by comparing competency demands across roles.

This is a descriptive study representing a beginning effort to explore an extensive data base spanning the full range of roles and the full population of school administrators in a single state.

RATIONALE

Many of our efforts to understand the relationship between gender and school administration have focused on explaining the limited numbers of women in administration (Adkison, 1981; Estler, 1975).

Essentially the low numbers, particularly at the superintendent and secondary principal levels (generally less than one and ten percent respectively) have made other issues somewhat moot. Relative to background and performance, research reviews have indicated that women principals tend to have greater classroom experience, have been higher achievers than men academically and are viewed by their staffs as slightly stronger than their staffs on many dimensions of leadership (Estler, 1975; Fishel and Pottker, 1977). The studies noted in these reviews which go beyond the demographics of school administration tend to focus on single roles such as elementary or

secondary principals because of the origins of data bases in professional association associated with roles and the difficulties of collecting original data across roles.

The explanation for differences in leadership style have most often focused on sex-role socialization theory (Adkinson, 1981). Kanter (1977), however, suggests the structure of power, opportunity and social proportions in organizations strongly influence individual behavior. She argues that given the structural niches in which women are often placed they tend to be negatively affected in the distribution power, opportunity and numbers. In looking at school administrators, we look at a group of women who, structurally, are not typical of the majority of women in the organizations in which they work. In terms of the formal structure, as principal or superintendent, she would most likely have greater formal power and opportunity than female and male teachers in the same organization. However, relative to administrative peers the female administrator is by definition a numerical minority in proportions that become increasingly miniscule as we increase in grade level of schools administered or hierarchical level within the district structure. Thus, her theory would suggest that we would expect to see gender differences in behavior across roles as a function of the proportion of women at each level. One observation she makes of those low in numbers is that they are more visible in their roles and that they must work harder to prove their competence. In short, majority group members may be assumed competent until proven otherwise, while numerical minorities--those who look different from the norm--may often be assumed less than competent until they prove otherwise.

While the focus of this study is primarily a descriptive one and not a hypothesis-testing one, this review nevertheless suggests some speculation about likely gender-related outcomes. A number of writers, exemplified by

Carol Gilligan (1982), suggest biological and societal forces contribute to gender differences in moral development and consequently in the interpretation of life experience. If so, we could expect to see differences in the relative importance female and male administrators would ascribe to various competencies called for in their jobs. Further, we could expect the general pattern of those differences to remain consistent across roles.

We might, for example, expect higher emphasis on communication and interaction skills on the part of women across roles as opposed to relatively higher emphasis by men on political and budgeting skills. However, if, as structuralists such as Kanter (1977) might suggest, organizational and role demands shape the nature of perceived competencies, we could expect to see high variation across roles and little by gender.

METHODS

The data for this study were collected using the Maine School Administrator Competency Survey which was administered in 1986 to provide descriptive information relative to the revision of Maine administrative certification standards. The purpose of the policy study was to gain more empirical understanding of:

1. The degree to which competencies were generic across roles or role specific.
2. The degree to which competencies demanded varied by level.
3. Variation in time usage across roles and levels.
4. The relationship between sources of preparation and perceived effectiveness.

The survey was sent to all administrators in the state with the endorsement of major professional groups and the state Commissioner of Education and Cultural Services. The survey yielded responses for 61 percent of all public school

principals, and 66 percent of all superintendents. One hundred percent of female secondary principals and superintendents responded. While limited to a single state, the data base is unusual in permitting comparisons across roles. Inasmuch as comparable efforts tend to be based in professional associations, they typically focus on a single role. These data permit comparison across nine administrative roles. This paper represents the results of initial efforts to explore this extensive data base relative to gender implications specifically related to full-time elementary and secondary principals and superintendents.

The section of the survey relevant to this specific study consisted of fifty-two items describing specific administrative competencies and attributes. Respondents were asked to rate each of the first forty-four skills or competencies on a four point scale relative to the level of expertise in the particular competency called for in the individual's current job. The final eight items, also rated on a four point scale relative to the demand on the job, represented personal attributes such as self-esteem, sensitivity, commitment to students, conceptualization and analysis skills, and tolerance of ambiguity. The entire list of competencies and attributes is included in Table 1.

The items were based on literature review described in greater length in Macdougall and Estler (1987), review of similar effort in other states, and generation by educational administration faculty at the University of Maine. The initial lists of items were reviewed by a group of field-based administrators and modified further in organization, format and content in response to their reactions, strengthening the face validity of the instrument.

As noted previously the population upon which this study focuses includes full-time principals and superintendents in Maine in 1986. Broken down by

gender and level the respondents include 135 male elementary principals, 36 female elementary principals, 61 male secondary principals, 4 female secondary principals, 78 male superintendents and 6 female superintendents. While the numbers of female secondary principals and superintendents appear low for purposes of statistical analysis, it is important to note that they represent the full population of each group with a 100% return rate rather than a sample. The data were analyzed using analysis of variance to test mean differences by gender within roles. Given the racial composition of Maine workforce at 99% caucasian, race was not used as a variable in the data analysis as would be appropriate if there were sufficient numbers for interpretation of the interaction between race and gender.

RESULTS

The results of this study are summarized in Table 1 which lists the competencies and attributes for which data were sought and the mean responses broken down by gender and role--elementary principal, secondary principal and superintendent. It shows a preponderance of higher female mean responses than male--46, 49, and 45 of 52 items respectively are higher than their male counterparts for female elementary and secondary principals and superintendents. However, most of those differences were not statistically significant. Elementary principals showed the highest number of statistically significant mean difference with 14 of 52 items. Secondary principals and superintendents had 4 and 2 items respectively that were statistically significant relative to gender differences. One could read these results as suggesting greater homogeneity in perceived competency demands at increasingly higher levels. Or they may simply reflect the statistical demands of higher differences for statistical significance with lower numbers. In addition to means, Table 1

includes standard deviations, notations regarding significance levels and an indicator for means in which men produced a higher mean than female counterparts. The data in Table 1 suggest that both gender and role are related with the perception of competencies demanded in each role.

The specific content of statistically significant items allows more direct exploration of earlier speculations regarding outcomes. Table 2 highlights those competencies showing statistical differences in mean responses by gender. The table lists each significant competency with the higher group and level of significance identified by role. Each of the items in which the mean responses for women were significantly higher could be classified as related more to instructional leadership and related human relations skills than to traditional management methods. The two items for which men had significantly higher means in at least one of three roles were insufficient to suggest a pattern. While the higher male response to "financial planning and monitoring" among superintendents might fit our speculation, the higher male response among elementary principals to "understanding adolescent development processes" may not. (It may in fact simply reflect a disproportionate representation of male principals in elementary schools with higher grades.) It seems interesting to note that the two competencies for which two roles had significantly higher female responses were "conceptualization skills" and "analysis/problem-solving skills."

While not statistically significant, the content of the relatively few items for which men indicated higher expertise demanded in their jobs than women might allow further exploration for patterns. Table 3 lists all competencies in which the mean responses were higher for male administrators than female administrators. The table also indicates the job group and significance level, if appropriate where men had higher means. The difference

from the items listed in Table 2 which listed those in which women's responses were significantly higher than men's is striking. While it is important to remember that most of the differences in Table 3 were not significant, a pattern is clearly suggested. The two items, for example, in which men had higher means in all three job groups were "understanding collective bargaining processes and issues," and "facilities planning, maintenance and operation." "Understanding the use of computers for management, information and planning" included higher male means for both elementary and secondary principals. These results have intentionally been presented with an effort to minimize interpretation. The low numbers of women in two of three job groups and the limited numbers of statistically significant differences call for some caution in moving toward sweeping generalizations. However, the patterns do raise some interesting questions which should call for at least some playful speculation in the following discussion.

DISCUSSION

The results presented in the previous section raise several questions related to interpretation:

1. Why are the female mean responses higher than men on an overwhelming proportion of items?
2. What meaning can we infer from the decreasing number of gender related differences at increasingly higher levels?
3. What meaning can we infer about patterns of differences in male and female administrators relative to the content of the items on which they differ?

The preponderance of higher female mean responses in three roles must be viewed with a conscious awareness of the original data source--a survey seeking self-reports on the degree to which numerous competencies are demanded

in each role. Thus, they represent perceptions of demanded competencies which may or may not reflect actual demands. Kanter suggests reasons to expect both perceived and actual differences in competencies demanded, however.

In relation to the perceptions of administrators themselves, Kanter's theory would predict those in the numerical minority to feel greater internal and external pressure to prove themselves. Thus, even if there were similar external competency demands on male and female administrators, we might expect women to be more sensitive to those demands. However, Kanter's theory would also predict that the external competence demands on numerical minorities would be greater given the assumption of competence among majorities.

A third explanation based in filter theory (Estler, 1975) may suggest that the differences in perceived competency may reflect real differences in competence. If we looked at the careers of school administrators as a series of moves through increasingly narrow filters, through which a smaller group (male teachers) has traditionally had greater access than another (female teachers), it stands to reason that those chosen from the group with more limited access would represent a smaller portion of the group as a whole and a narrower more selective range of competence.

The decreasing number of significant gender related differences at increasingly higher levels again may be explained in several ways. The most obvious is with caution--it may be a statistical artifact resulting from the low numbers of female secondary principals and superintendents. Perhaps with greater numbers similar differences might be evidenced at higher levels. I suspect this explanation is overly simplistic. Despite the low numbers, the standard deviations between male and female respondents in the higher level groups are often quite similar and show similar variation across competencies. I would not want to totally dismiss the possibility of the decreasing number

of differences at higher levels as being a function of small numbers. However, they may be real. If so, the power of role demands cannot be ignored. Each successive role culminating in the superintendency calls for greater experience in schools and greater certification requirements. Both are key mechanisms for professional socialization. Add to socialization, the real demands placed on roles by constituents, we could reasonably expect to see a mediation of gender related differences with progressively complex roles requiring greater experience and education.

An alternative explanation to socialization is the homogeneity argument which would assume that as the level of discretionary decision making increases so, too, would homogeneity in hiring. In other words people would hire those like themselves to be trusted with discretionary decision making, so that the women passing through each successive filter would be more similar in values and background to those above them than women not selected.

Despite the similarities that might be produced by role demands and training, the pattern of content differences based on gender is fascinating if mostly statistically insignificant. Typically women are higher at a statistically significant level on people-related and cognitive competencies and attributes while the few areas men tended to be higher are those related to "things" and conflict i.e. facilities management, computer usage, and collective bargaining. Again, it is important to remember that, on average, the two groups were generally more similar than different especially among secondary principals and superintendents. However, the extremes do seem to fit numerous sociological and psychological theories of sex-role socialization and psychological development.

In summary, the most marked outcome of this study was the consistency of higher perceived competency demands by women across administrative roles.

This could reflect higher internal expectations, or higher external demands on female administrators. Regardless of explanation women in administration expect themselves to use more skills and knowledge in their jobs at a higher level of expertise than their male colleagues.

With the exception, perhaps, of the elementary principalship, the next most striking outcome is the similarity of male and female responses within roles. This suggests the strong influence of the job itself in shaping competency expectations. Finally, where gender differences did occur, they were striking in the degree to which they fit current theories of sex role development.

References

- Adkison, J.A. Women in School Administration: A Review of the Literature, Review of Educational Research, Fall 1981, 51, 3, pp. 311-343.
- Biklen, S.K. Can Elementary Schoolteaching Be a Career? A Search for the new ways of understanding women's work, Issues in Education, Vol. III, No. 3, 1985, pp. 215-331.
- Estler, S.E. Women as Leaders in Public Education, SIGNS Journal of Women in Culture and Society, Vol. 1, No. 2.
- Fishel, A. and Pottker, J. "Performance of Women Principals: A Review of Behavioral and Attitudinal Studies." In Fishel, A. and Pottker, J. (eds.), Sex Bias in the Schools, Rutherford, N.J.: Fairleigh Dickinson University Press, 1977.
- Gilligan, C. In a Different Voice, Cambridge, MA: Harvard University Press, 1982.
- Kanter, R.M. Men and Women of the Corporation, New York: Basic Books, 1977.

TABLE I
MEAN RESPONSES TO ADMINISTRATIVE COMPETENCY DEMANDS IN CURRENT JOB BY ROLE AND SEX

Key: 0=not applicable 1=some expertise required 2=moderate level of expertise required 3=high level of expertise required significance * $P < .05$ ** $P < .01$ M=male average higher		Elementary Principals Male Female N=135 N=36		Secondary Principals Male Female N=61 N=4		Superintendents Male Female N=78 N=6	
1. understanding the purposes of education	$\bar{x}$ SD	2.74 .51	2.78 .54	2.69 .53	3.00 0	2.91 .33	2.83(M) .41
2. understanding teaching and instructional delivery strategies	$\bar{x}$ SD	2.83 .43	2.94 .23	2.74 .51	3.00 0	2.61 .51	2.67 .52
3. understanding curriculum design methods	$\bar{x}$ SD	2.46 .64	2.64 .54	2.49 .65	2.75 .50	2.40 .63	2.50 .55
4. understanding curriculum development	$\bar{x}$ SD	2.56 .62	2.83 .45	2.74 .54	2.75 .50	2.62 .61	2.83 .41
5. understanding curriculum evaluation methods	$\bar{x}$ SD	2.51 .65	2.61 .60	2.64 .58	2.75 .50	2.59 .59	2.67 .52
6. understanding of school system and roles	$\bar{x}$ SD	2.55 .70	2.75 .50	2.62 .64	2.75 .50	2.92 .27	3.00 .00
7. conceptualizing, communicating and sustaining a common mission (goal and priority setting)	$\bar{x}$ SD	2.63 .61	2.72 .57	2.59 .64	3.00 .00	2.94 .25	3.00 .00
8. understanding parental, community, state and national contexts	$\bar{x}$ SD	2.35 .67	2.42 .60	2.48 .70	3.00 .00	2.69 .57	2.83 .41
9. fostering positive climate and discipline	$\bar{x}$ SD	2.90 .31	3.00 .24	2.97 .18	3.00 .00	2.65 .58	2.83 .41

TABLE 1 (Continued)
MEAN RESPONSES TO ADMINISTRATIVE COMPETENCY DEMANDS IN CURRENT JOB BY ROLE AND SEX

Key: 0=not applicable 1=some expertise required 2=moderate level of expertise required 3=high level of expertise required significance *P<.05 **P<.01 M=male average higher		Elementary Principals Male N=135 Female N=36		Secondary Principals Male N=61 Female N=4		Superintendents Male N=78 Female N=6	
10. understanding political theory and its ap- plication in building support for education	$\bar{x}$ SD	1.84 .86	2.11 .85	2.08 .78	2.75 .50	2.62 .56	2.83 .41
11. using supervision as a staff improvement and evaluation strategy	$\bar{x}$ SD	2.81 .47	2.81 .47	2.74 .51	3.00 .00	2.69 .52	2.83 .41
12. assessing individual and institutional sources of stress	$\bar{x}$ SD	1.76 .88	2.17** .85	1.82 .76	2.50 .58	2.04 .79	2.17 .75
13. application of methods to reduce indivi- dual and institutional sources of stress	$\bar{x}$ SD	1.73 .92	2.17** .81	1.92 .74	2.50 .58	2.00 .74	2.17 .75
14. understanding individual behavior in organizational settings	$\bar{x}$ SD	2.27 .77	2.64** .59	2.44 .67	2.75 .50	2.59 .61	2.83 .41
15. financial planning and monitoring	$\bar{x}$ SD	2.22 .69	2.33 .63	2.39 .61	2.50 .58	2.95 .27	2.67*(M) .52
16. proficiency with legal issues	$\bar{x}$ SD	1.82 .67	1.81(M) .71	2.04 .76	2.25 .96	2.59 .67	2.67 .52
17. managing time effectively	$\bar{x}$ SD	2.75 .49	2.75 .50	2.64 .61	3.00 .00	2.84 .29	2.83(M) .41
18. understanding personnel systems: e.g., roles, recruitment, evaluation, and staff development processes	$\bar{x}$ SD	2.59 .58	2.72 .45	2.64 .48	2.75 .50	2.87 .37	3.00 .00

TABLE 1 (Continued)
MEAN RESPONSES TO ADMINISTRATIVE COMPETENCY DEMANDS IN CURRENT JOB BY ROLE AND SEX

Key: 0=not applicable 1=some expertise required 2=moderate level of expertise required 3=high level of expertise required significance * $P < .05$ ** $P < .01$ M=male average higher		Elementary Principals Male N=135 Female N=36		Secondary Principals Male N=61 Female N=4		Superintendents Male N=78 Female N=6	
19. understanding collective bargaining processes and issues	$\bar{x}$ SD	1.55 .80	1.47(M) .70	1.67 .68	1.00(M) 1.15	2.74 .52	2.67(M) .52
20. understanding decision making strategies and techniques	$\bar{x}$ SD	2.62 .53	2.78 .42	2.69 .47	3.00 .00	2.82 .42	3.00 .00
21. coordinating and scheduling-keeping the organization functioning well	$\bar{x}$ SD	2.72 .50	2.81 .40	2.84 .42	3.00 .00	2.64 .56	2.67 .52
22. communicating role of management tasks in context of educational goals	$\bar{x}$ SD	2.33 .65	2.50 .56	2.38 .66	2.50 .58	2.65 .55	2.83 .41
23. facilities planning, maintenance and operation	$\bar{x}$ SD	2.07 .82	1.97(M) .56	2.21 .66	2.00(M) 1.15	2.47 .60	2.33(M) .52
24. understanding measurement tools and methods for certifying student performance	$\bar{x}$ SD	2.38 .66	2.47 .56	2.25 .67	2.48 .55	1.91 .61	2.33 .52
25. understanding measurement tools and methods for certifying staff performance	$\bar{x}$ SD	2.49 .68	2.58 .55	2.48 .67	2.75 .50	2.50 .64	2.67 .52
26. structuring feedback mechanisms for individuals and the system	$\bar{x}$ SD	2.19 .76	2.53* .74	2.28 .61	2.75 .50	2.29 .69	2.50 .55
27. anticipating occupational trends and their educational implications	$\bar{x}$ SD	1.43 .83	1.53 .81	1.87 .81	2.50 .58	1.90 .80	2.17 .57

TABLE 1 (Continued)
MEAN RESPONSES TO ADMINISTRATIVE COMPETENCY DEMANDS IN CURRENT JOB BY ROLE AND SEX

Key: 0=not applicable 1=some expertise required 2=moderate level of expertise required 3=high level of expertise required significance * $P < .05$ ** $P < .01$ M=male average higher		Elementary Principals Male N=135		Secondary Principals Male N=61		Superintendents Male N=78	
		Female N=36		Female N=4		Female N=6	
28. applying evaluation and planning models and methods	$\bar{x}$ SD	2.14 .77	2.19 1.01	2.31 .67	3.00* .00	2.41 .65	2.50 .55
29. understanding the use of computers for management, information and planning	$\bar{x}$ SD	1.71 .79	1.47(M) .77	2.02 .72	1.75(M) .96	2.08 .68	2.33 .52
30. listening with an open mind	$\bar{x}$ SD	2.80 .50	2.94 .23	2.82 .43	3.00 .00	2.87 .44	3.00 .00
31. consulting effectively with groups and individuals	$\bar{x}$ SD	2.81 .42	2.92 .28	2.79 .49	3.00 .00	2.86 .45	3.00 .00
32. conducting productive meetings	$\bar{x}$ SD	2.81 .42	2.86 .35	2.69 .56	3.00 .00	2.90 .38	3.00 .00
33. providing effective feedback to improve individual performance	$\bar{x}$ SD	2.79 .44	2.92 .28	2.82 .43	3.00 .00	2.76 .49	3.00 .00
34. communicating orally and in writing	$\bar{x}$ SD	2.79 .44	2.94* .23	2.80 .44	3.00 .00	2.87 .41	3.00 .00
35. directing and motivating adults effectively	$\bar{x}$ SD	2.71 .50	2.89* .40	2.74 .54	3.00 .00	2.87 .37	3.00 .00
36. sensitivity to and understanding of group dynamics	$\bar{x}$ SD	2.55 .61	2.81* .52	2.56 .59	3.00 .00	2.78 .42	3.00 .00

TABLE 1 (Continued)
MEAN RESPONSES TO ADMINISTRATIVE COMPETENCY DEMANDS IN CURRENT JOB BY ROLE AND SEX

Key: 0=not applicable 1=some expertise required 2=moderate level of expertise required 3=high level of expertise required significance * $P < .05$ ** $P < .01$ M=male average higher		Elementary Principals Male Female N=135 N=36		Secondary Principals Male Female N=61 N=4		Superintendents Male Female N=78 N=6	
37. understanding child development processes	$\bar{x}$ SD	2.72 .48	2.78 .48	2.50 .67	3.00 .00	2.32 .57	2.50 .84
38. understanding adolescent development processes	$\bar{x}$ SD	2.42 .83	2.08*(M) 1.08	2.61 .61	3.00 .00	2.28 .58	2.50 .84
39. understanding adult development processes	$\bar{x}$ SD	2.11 .88	2.31 .86	2.33 .72	2.50 1.00	2.22 .68	2.50 .84
40. understanding multicultural, ethnic and gender differences and their implications for student learning	$\bar{x}$ SD	1.70 .87	1.86 .87	1.82 .79	2.00 1.41	1.74 .73	2.67** .52
41. understanding specific handicapping conditions and their effects on learning	$\bar{x}$ SD	2.14 .77	2.42* .65	2.23 .62	2.50 1.00	1.90 .66	2.00 .63
42. understanding needs of gifted students	$\bar{x}$ SD	2.16 .70	2.33 .59	2.16 .64	2.50 1.00	2.00 .60	2.00 .63
43. understanding social problems and their effect on students and families	$\bar{x}$ SD	2.42 .65	2.70* .47	2.48 .57	3.00 .00	2.22 .70	2.33 .82
44. awareness of school and community resources to meet special student needs	$\bar{x}$ SD	2.34 .67	2.39 .69	2.36 .63	3.00* .00	2.37 .72	2.33(M) .82

TABLE 1 (Continued)
MEAN RESPONSES TO ADMINISTRATIVE COMPETENCY DEMANDS IN CURRENT JOB BY ROLE AND SEX

Key: 0=not applicable 1=some expertise required 2=moderate level of expertise required 3=high level of expertise required significance * $P < .05$ ** $P < .01$ M=male average higher		Elementary Principals Male Female N=135 N=36		Secondary Principals Male Female N=61 N=4		Superintendents Male Female N=78 N=6	
45. sensitivity, empathy	$\bar{x}$ SD	2.40 .52	2.67** .48	2.52 .54	2.75 .50	2.38 .52	2.50 .55
46. positive self-image, self-confidence	$\bar{x}$ SD	2.68 .47	2.81 .40	2.74 .44	2.75 .50	2.74 .45	2.67(M) .52
47. commitment to students	$\bar{x}$ SD	2.87 .35	2.94 .23	2.82 .39	3.00 .00	2.77 .42	3.00 .00
48. conceptualization skills	$\bar{x}$ SD	2.30 .55	2.54* .51	2.20 .51	2.75* .50	2.46 .53	2.83 .41
49. analysis/problem solving skills	$\bar{x}$ SD	2.44 .53	2.74** .44	2.39 .53	3.00* .00	2.69 .46	3.00 .00
50. tolerance of ambiguity	$\bar{x}$ SD	2.14 .62	2.42* .65	2.25 .65	2.75 .50	2.32 .69	2.67 .52
51. tolerance of differences	$\bar{x}$ SD	2.50 .55	2.47(M) .51	2.49 .54	2.75 .50	2.50 .55	2.83 .41
52. a sense of justice and its application to administration	$\bar{x}$ SD	2.60 .55	2.64 .49	2.74 .48	3.00 .00	2.69 .49	3.00 .00

TABLE 2

COMPETENCIES SHOWING SIGNIFICANT SEX DIFFERENCES IN MEAN RESPONSES BY JOB GROUP ¹

Survey Question	Elementary Principals	Secondary Principals	Superintendents
Assessing individual and institutional sources of stress	Female**		
Application of methods to reduce individual and institutional sources of stress	Female**		
Understanding individual behavior in organizational setting	Female**		
Financial planning and monitoring			Male*
Structuring feedback mechanisms for the individual and the system	Female*		
Applying evaluation and planning modes and methods		Female*	
Communicating orally and in writing	Female*		
Directing and motivating adults effectively	Female*		
Sensitivity to and understanding of group dynamics	Female*		
Understanding adolescent development processes	Male*		
Understanding multicultural, ethnic and gender differences and their implications for student learning			Female**
Understanding specific handicapping conditions and their effects on learning	Female*		

TABLE 2 (Continued)

COMPETENCIES SHOWING SIGNIFICANT SEX DIFFERENCES IN MEAN RESPONSES BY JOB GROUP ¹

Survey Question	Elementary Principals	Secondary Principals	Superintendents
Understanding social problems and the effect on students and families	Female*		
Awareness of school and community resources to meet special student needs		Female*	
Sensitivity, empathy	Female**		
Conceptualization skills	Female*	Female*	
Analysis/problem solving skills	Female**	Female*	
Tolerance of ambiguity	Female*		

* $p \leq .05$ ** $p \leq .01$ ¹ Gender listed with the significance level is that with the higher mean response.

TABLE 3

COMPETENCIES WITH MEAN RESPONSES HIGHER FOR MALE ADMINISTRATORS

Competency or Attribute	Job Group Where Male Responses Higher
Understanding the purposes of Education	Superintendents
Financial planning and monitoring	Superintendents ($p < .05$)
Managing time effectively	Superintendents
Understanding collective bargaining processes and issues	Elementary and Secondary principals Superintendents
Facilities planning, maintenance and operation	Elementary and secondary principals Superintendents
Understanding the use of computers for management, information and planning	Elementary and Secondary principals
Understanding adolescent development	Elementary principals ($p < .05$)
Awareness of school and community resources to meet special student needs	Superintendents
Positive self-image, self confidence	Superintendents
Tolerance of differences	Elementary principals
Note: With the exceptions of those noted above, female administrators consistently had higher mean responses to the level of expertise demanded by their present jobs relative to 52 competencies and attributes (listed in Table 1). Unless otherwise indicated, male-female differences relative to the above competencies were not statistically significant.	

TABLE 3

COMPETENCIES WITH MEAN RESPONSES HIGHER FOR MALE ADMINISTRATORS

Competency or Attribute	Job Group Where Male Responses Higher
Understanding the purposes of Education	Superintendents
Financial planning and monitoring	Superintendents ($p \leq .05$)
Managing time effectively	Superintendents
Understanding collective bargaining processes and issues	Elementary and Secondary principals Superintendents
Facilities planning, maintenance and operation	Elementary and secondary principals Superintendents
Understanding the use of computers for management, information and planning	Elementary and Secondary principals
Understanding adolescent development	Elementary principals ($p \leq .05$)
Awareness of school and community resources to meet special student needs	Superintendents
Positive self-image, self confidence	Superintendents
Tolerance of differences	Elementary principals
Note: With the exceptions of those noted above, female administrators consistently had higher mean responses to the level of expertise demanded by their present jobs relative to 52 competencies and attributes (listed in Table 1). Unless otherwise indicated, male-female differences relative to the above competencies were not statistically significant.	